

7-27-05

IFW



PATENTS  
112025-0164C1  
8711

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re The Application of:  
William Fredenburg et al.

Serial No.: 10/731,971

Filed: December 10, 2003

For: A Processor Isolation Technique for  
Integrated Multi-Processor Systems

Examiner: Maskulinski, Michael C.

Art Unit: 2184

Cesari and McKenna, LLP  
88 Black Falcon Avenue  
Boston, MA 02210  
July 26, 2005

**EXPRESS-MAIL DEPOSIT**

“Express Mail” Mailing-Label Number: EV 432398151 US

The following papers are being deposited with the United States Postal Service  
“Express Mail Post Office to Addressee” service pursuant to 37 C.F.R. §1.10:

X Information Disclosure Statement  
X Return Receipt Postcard

X PTO-1449



PATENTS  
112025-0164C1  
8711

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re The Application of:	)	
William Fredenburg et al.	)	
	)	Examiner: Maskulinski, Michael C.
Serial No.: 10/731,971	)	
	)	
Filed: December 10, 2003	)	Art Unit: 2184
	)	
For: A Processor Isolation Technique for	)	
Integrated Multi-Processor Systems	)	
	)	
		Cesari and McKenna, LLP
		88 Black Falcon Avenue
		Boston, MA 02210
		July 26, 2005

"Express Mail" Mailing-Label Number: EV 432398151 US

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION-DISCLOSURE STATEMENT**

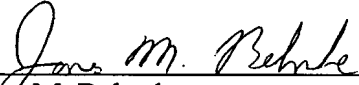
In keeping with the duty of candor and good faith owed to the Patent and Trade-mark Office, Applicants wish to bring to the Examiner's attention the references listed on the accompanying form PTO-1449. A copy of each listed reference is enclosed.

Copies of cited art are not enclosed pursuant to 37 C.F.R. §1.98(d)(1) because they were submitted in the parent U.S. Patent Application Serial No. 09/432,526, filed November 3, 1999, now issued as U.S. Patent No. 6,681,341 on January 20, 2004.

To the extent required by 37 C.F.R. §1.98(a)(3), Applicants have described what they consider to be the relevance of any foreign-language reference. The Office may find additionally relevant material in these or other references.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

  
\_\_\_\_\_  
James M. Behmke  
Reg. No. 51,448  
CESARI AND MCKENNA, LLP  
88 Black Falcon Avenue  
Boston, MA 02210-2414  
(617) 951-2500

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 6

### Complete if Known

Application Number	10/731,971
Filing Date	December 10, 2003
First Named Inventor	William Fredenburg et al.
Group Art Unit	2184
Examiner Name	Maskulinski, Michael C.
Attorney Docket Number	112025-0164C1

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	Computer Architecture The Anatomy of Modern Processors, Pipeline Hazards, world wide web page <a href="http://ciips.ee.uwa.edu.au/~morris/CA406/pipe_hazard.html">http://ciips.ee.uwa.edu.au/~morris/CA406/pipe_hazard.html</a> , 1999, pages 1-6.	

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

112025-0164C1

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	21	5129077		Hillis	07-1992	
	22	5148547		Kahle et al.	09-1992	
	23	5151996		Hillis	09-1992	
	24	5157663		Major et al.	10-1992	
	25	5161156		Baum et al.	11-1992	
	26	5166674		Baum et al.	11-1992	
	27	5168499		Peterson et al.	12-1992	
	28	5175865		Hillis	12-1992	
	29	5212773		Hillis	05-1993	
	30	5222216		Parish et al.	06-1993	
	31	5222237		Hillis	06-1993	
	32	5247613		Bromley	09-1993	
	33	5247694		Dahl	09-1993	
	34	5255291		Holden et al.	10-1993	
	35	5261105		Pollet et al.	11-1993	
	36	5265207		Zak et al.	11-1993	
	37	5274631		Bhardwaj	12-1993	
	38	5289156		Ganmukhi	02-1994	
	39	5295258		Jewett et al.	03-1994	
	40	5297263		Ohtsuka et al.	03-1994	

[illegible]

Date Considered

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**



+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

*(use as many sheets as necessary)*

Sheet

4

of

6

Application Number

**Complete if Known**

10/731.971

Filing Date

December 10, 2003

**First Named Inventor**

William Fredenburg et al.

### Group Art Unit

2184

Examiner Name

**Maskulinski, Michael C.**

Attorney Docket Number

112025-0164C1

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	41	5301310		Isman et al.	04-1994	
	42	5317726		Horst	05-1994	
	43	5355492		Frankel et al.	10-1994	
	44	5357612		Alaiwan	10-1994	
	45	5361363		Wells et al.	11-1994	
	46	5367692		Edelman	11-1994	
	47	5388214		Leiserson et al.	02-1995	
	48	5388262		Hillis	02-1995	
	49	5390298		Kuszmaul et al.	02-1995	
	50	5404296		Moorhead	04-1995	
	51	5404562		Heller et al.	04-1995	
	52	5410723		Schmidt et al.	04-1995	
	53	5455932		Major et al.	10-1995	
	54	5485627		Hillis	01-1996	
	55	5530804		Edgington et al.	06-1996	
	56	5530809		Douglas et al.	06-1996	
	57	5535408		Hillis	01-1996	
	58	5561669		Lenney et al.	10-1996	
	59	5617538		Heller	04-1997	
	60	5621885		Del Vigna, Jr.	04-1997	

[illegible]

**Examiner  
Signature**

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Number	10/731,971
Filing Date	December 10, 2003
First Named Inventor	William Fredenburg et al.
Group Art Unit	2184
Examiner Name	Maskulinski, Michael C.
Attorney Docket Number	112025-0164C1

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	61	5623689		Kaneko	04-1997	
	62	5627965		Liddell et al.	05-1997	
	63	5679423		Hillis	09-1997	
	64	5710814		Klemba et al.	01-1998	
	65	5742604		Edsall et al.	04-1998	
	66	5751955		Sonnier et al.	05-1998	
	67	5764636		Edsall	06-1998	
	68	5787255		Parlan et al.	07-1998	
	69	5838915		Klausmeier et al.	11-1998	
	70	6021511		Nakano	02-2000	
	71	6101599		Wright et al.	08-2000	
	72	6112288		Ullner	08-2000	
	73	6119215		Key et al.	09-2000	
	74	6173386	B1	Key et al.	01-2001	
	75	6195739	B1	Wright et al.	02-2001	
	76	6349378	B1	Durantont et al.	02-2002	
	77	6356548		Nellenbach et al.	03-2002	
	78	6385747		Scott et al.	05-2002	
	79	6513108		Kerr et al.	01-2003	
	80	6505269		Potter	01-2003	

[illegible]

Date Considered

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



11) +

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

Filing Date	December 10, 2003
-------------	-------------------

Group Art Unit	2184
----------------	------

Examiner Name	Maskulinski, Michael C.
---------------	-------------------------

Attorney Docket Number	112025-0164C1
------------------------	---------------

Sheet	6	of	6
-------	---	----	---

[illegible][illegible]

Date Considered

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**